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NEWS 4	DEC 08	INPADOC: Legal Status data reloaded
NEWS 5	SEP 29	DISSABS now available on STN
NEWS 6	OCT 10	PCTFULL: Two new display fields added
NEWS 7	OCT 21	BIOSIS file reloaded and enhanced
NEWS 8	OCT 28	BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9	NOV 24	MSDS-CCOHS file reloaded
NEWS 10	DEC 08	CABA reloaded with left truncation
NEWS 11	DEC 08	IMS file names changed
NEWS 12	DEC 09	Experimental property data collected by CAS now available in REGISTRY
NEWS 13	DEC 09	STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14	DEC 17	DGENE: Two new display fields added
NEWS 15	DEC 18	BIOTECHNO no longer updated
NEWS 16	DEC 19	CROPU no longer updated; subscriber discount no longer available
NEWS 17	DEC 22	Additional INPI reactions and pre-1907 documents added to CAS databases
NEWS 18	DEC 22	IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19	DEC 22	ABI-INFORM now available on STN
NEWS 20	JAN 27	Source of Registration (SR) information in REGISTRY updated and searchable
NEWS 21	JAN 27	A new search aid, the Company Name Thesaurus, available in CA/CAplus
NEWS 22	FEB 05	German (DE) application and patent publication number format changes

NEWS EXPRESS	DECEMBER 28 CURRENT WINDOWS VERSION IS V7.00, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003
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=> s BMDSP or bone marrow derived serum protein
L1             7 BMDSP OR BONE MARROW DERIVED SERUM PROTEIN

=> s MSE55
L2            26 MSE55

=> s l1 and l2
L3             1 L1 AND L2

=> d l3 ti abs ibib tot

L3    ANSWER 1 OF 1  DGENE  COPYRIGHT 2004 THOMSON DERWENT on STN
TI    Purified polypeptide for treating or preventing disorders associated with
      decreased expression or activity of bone marrow-derived serum proteins
AN    AAY92240  Protein        DGENE
AB    Human bone marrow-derived serum proteins (BMDSP) 2 has chemical
      and structural similarity with MSE55.  BMDSP-1 and
      BMDSP-2 are useful for treating or preventing a disorder
      associated with decreased expression or activity of BMDSP.
      Antagonists of BMDSP are useful for treating or preventing a
      disorder associated with increased expression or activity of bone
      marrow-derived serum proteins.  The disorders include cancers (melanoma,
      adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency
      syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis,
      multiple sclerosis, osteo- and rheumatoid arthritis), viral infections,
      parasitic infections (schistosoma, tapeworm), and vascular disorders
      (arteriosclerosis, hypertension, vasculitis).
ACCESSION NUMBER: AAY92240  Protein        DGENE
TITLE:            Purified polypeptide for treating or preventing disorders
                  associated with decreased expression or activity of bone
                  marrow-derived serum proteins
INVENTOR:         Tang Y T; Corley N C; Guegler K J; Lu D A M
```

Applicant

PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: N-PSDB: AAA09155
DESCRIPTION: Human **bone marrow-derived serum protein** 2.

=> d l1 ti abs ibib tot

L1 ANSWER 1 OF 7 USPATFULL on STN
TI Combined pharmaceutical estrogen-androgen-progestin
AB Disclosed are methods and compositions for oral contraception and for hormone replacement therapy. Certain compositions of the invention contain androgens, preferably methyltestosterone to be taken in conjunction with estrogens and progestins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2000:145919 USPATFULL
TITLE: Combined pharmaceutical estrogen-androgen-progestin
INVENTOR(S): Hughes, Jr., Claude L., Simi Valley, CA, United States
Jayo, Manuel J., Advance, NC, United States
PATENT ASSIGNEE(S): Cedars-Sinai Medical Center, Los Angeles, CA, United States (U.S. corporation)
Wake Forest University, Winston-Salem, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6139873		20001031
APPLICATION INFO.:	US 1998-177866		19981023 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-102707, filed on 22 Jun 1998, now patented, Pat. No. US 5962021 which is a continuation of Ser. No. US 1996-679764, filed on 10 Jul 1996, now patented, Pat. No. US 5770226
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Spear, James M.
LEGAL REPRESENTATIVE: Corder, Timothy S.Vinson & Elkins LLP
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
LINE COUNT: 2447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 2 OF 7 USPATFULL on STN
TI Combined pharmaceutical estrogen-androgen-progestin oral contraceptive
AB Disclosed are methods and compositions for oral contraception and hormonal therapy. Certain compositions and methods of the invention contain androgens, and preferably methyltestosterone to be combined with estrogen and progestin compositions in a hormonal component of a pharmaceutical composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 1999:120925 USPATFULL
TITLE: Combined pharmaceutical estrogen-androgen-progestin oral contraceptive
INVENTOR(S): Hughes, Jr., Claude L., Ventura, CA, United States
Jayo, Manuel J., Advance, NC, United States
PATENT ASSIGNEE(S): Wake Forest Universtiy, Winston-Salem, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5962021		19991005
APPLICATION INFO.:	US 1998-102707		19980622 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1996-679764, filed on 10 Jul 1996, now patented, Pat. No. US 5770226		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Spear, James M.		
LEGAL REPRESENTATIVE:	Corder, Timothy S.Vinson & Elkins L.L.P.		
NUMBER OF CLAIMS:	94		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2251		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 3 OF 7 USPATFULL on STN
TI Combined pharmaceutical estrogen-androgen-progestin oral contraceptive
AB Disclosed are methods and compositions for oral contraception. Certain compositions of the invention contain androgens, preferably methyltestosterone to be taken by younger users of the contraceptives to inhibit adverse effects of oral contraceptive use on bone mineral density.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	1998:72268 USPATFULL
TITLE:	Combined pharmaceutical estrogen-androgen-progestin oral contraceptive
INVENTOR(S):	Hughes, Jr., Claude L., Mebane, NC, United States Jayo, Manuel J., Winston-Salem, NC, United States
PATENT ASSIGNEE(S):	Wake Forest University, Winston-Salem, NC, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5770226		19980623
APPLICATION INFO.:	US 1996-679764		19960710 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Page, Thurman K.		
ASSISTANT EXAMINER:	Spear, James M.		
LEGAL REPRESENTATIVE:	Arnold, White & Durkee		
NUMBER OF CLAIMS:	22		
EXEMPLARY CLAIM:	1		
LINE COUNT:	2356		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 4 OF 7 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
TI Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
AN AAY92240 Protein DGENE
AB Human bone marrow-derived serum proteins (**BMDSP**) 2 has chemical and structural similarity with MSE55. **BMDSP**-1 and **BMDSP**-2 are useful for treating or preventing a disorder associated with decreased expression or activity of **BMDSP**. Antagonists of **BMDSP** are useful for treating or preventing a disorder associated with increased expression or activity of bone marrow-derived serum proteins. The disorders include cancers (melanoma, adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis, osteo- and rheumatoid arthritis), viral infections, parasitic infections (schistosoma, tapeworm), and vascular disorders (arteriosclerosis, hypertension, vasculitis).

Applicant

ACCESSION NUMBER: AAY92240 Protein DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: N-PSDB: AAA09155
DESCRIPTION: Human **bone marrow-derived serum protein** 2.

L1 ANSWER 5 OF 7 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
TI Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
AN AAY92239 Protein DGENE
AB Human bone marrow-derived serum proteins (**BMDSP**) 1 has chemical and structural similarity with immunoglobulin kappa light chain. **BMDSP**-1 and **BMDSP**-2 are useful for treating or preventing a disorder associated with decreased expression or activity of **BMDSP**. Antagonists of **BMDSP** are useful for treating or preventing a disorder associated with increased expression or activity of bone marrow-derived serum proteins. The disorders include cancers (melanoma, adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis, osteo- and rheumatoid arthritis), viral infections, parasitic infections (schistosoma, tapeworm), and vascular disorders (arteriosclerosis, hypertension, vasculitis).
ACCESSION NUMBER: AAY92239 Protein DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: N-PSDB: AAA09154
DESCRIPTION: Human **bone marrow-derived serum protein** 1.

L1 ANSWER 6 OF 7 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
TI Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
AN AAA09155 DNA DGENE
AB Human bone marrow-derived serum proteins (**BMDSP**) 1 and **BMDSP**-2 are useful for treating or preventing a disorder associated with decreased expression or activity of bone marrow-derived serum proteins. Antagonists of **BMDSP** are useful for treating or preventing a disorder associated with increased expression or activity of bone marrow-derived serum proteins. The disorders include cancers (melanoma, adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis, osteo- and rheumatoid arthritis), viral infections, parasitic infections (schistosoma, tapeworm), and vascular disorders (arteriosclerosis, hypertension,

vasculitis).
ACCESSION NUMBER: AAA09155 DNA DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: P-PSDB: AAY92240
DESCRIPTION: Human **BMDSP**-2 coding sequence.

L1 ANSWER 7 OF 7 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
TI Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
AN AAA09154 DNA DGENE
AB Human bone marrow-derived serum proteins (**BMDSP**) 1 has chemical and structural similarity with immunoglobulin kappa light chain. **BMDSP**-1 and **BMDSP**-2 are useful for treating or preventing a disorder associated with decreased expression or activity of **BMDSP**. Antagonists of **BMDSP** are useful for treating or preventing a disorder associated with increased expression or activity of bone marrow-derived serum proteins. The disorders include cancers (melanoma, adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis, osteo- and rheumatoid arthritis), viral infections, parasitic infections (schistosoma, tapeworm), and vascular disorders (arteriosclerosis, hypertension, vasculitis).
ACCESSION NUMBER: AAA09154 DNA DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: P-PSDB: AAY92239
DESCRIPTION: Human **BMDSP**-1 coding sequence.

=> d l2 ti abs ibib tot

L2 ANSWER 1 OF 26 MEDLINE on STN
TI A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.
AB Cdc42, a Rho GTPase, regulates the organization of the actin cytoskeleton by its interaction with several distinct families of downstream effector proteins. Here, we report the identification of four new Cdc42-binding proteins that, along with **MSE55**, constitute a new family of effector proteins. These molecules, designated CEPs, contain three regions of homology, including a Cdc42 binding domain and two unique domains called CI and CII. Experimentally, we have verified that CEP2 and CEP5 bind Cdc42. Expression of CEP2, CEP3, CEP4, and CEP5 in NIH-3T3 fibroblasts induced pseudopodia formation. Fibroblasts coexpressing dominant negative Cdc42 with CEP2 or expressing a Cdc42/Rac interactive

binding domain mutant of CEP2 did not induce pseudopodia formation. In primary keratinocytes, CEP2- and CEP5-expressing cells showed reduced F-actin localization at the adherens junctions with an increase in thin stress fibers that extended the length of the cell body. Keratinocytes expressing CEPs also showed an altered vinculin distribution and a loss of E-cadherin from adherens junctions. Similar effects were observed in keratinocytes expressing constitutively active Cdc42, but were not seen with a Cdc42/Rac interactive binding domain mutant of CEP2. These results suggest that CEPs act downstream of Cdc42 to induce actin filament assembly leading to cell shape changes.

ACCESSION NUMBER: 2001191929 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11035016
TITLE: A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.
AUTHOR: Hirsch D S; Pirone D M; Burbelo P D
CORPORATE SOURCE: Department of Oncology, Lombardi Cancer Center, Georgetown University Medical Center, Washington, DC 20007, USA.
CONTRACT NUMBER: R29-CA77459-01 (NCI)
SOURCE: Journal of biological chemistry, (2001 Jan 12) 276 (2) 875-83.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF098290; GENBANK-AF099664; GENBANK-AF102773; GENBANK-AF104857
ENTRY MONTH: 200104
ENTRY DATE: Entered STN: 20010410
Last Updated on STN: 20030215
Entered Medline: 20010405

L2 ANSWER 2 OF 26 MEDLINE on STN
TI The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.
AB The Rho family of GTPases plays key roles in the regulation of cell motility and morphogenesis. They also regulate protein kinase cascades, gene expression, and cell cycle progression. This multiplicity of roles requires that the Rho GTPases interact with a wide variety of downstream effector proteins. An understanding of their functions at a molecular level therefore requires the identification of the entire set of such effectors. Towards this end, we performed a two-hybrid screen using the TC10 GTPase as bait and identified a family of putative effector proteins related to **MSE55**, a murine stromal and epithelial cell protein of 55 kDa. We have named this family the Borg (binder of Rho GTPases) proteins. Complete open reading frames have been obtained for Borg1 through Borg3. We renamed **MSE55** as Borg5. Borg1, Borg2, Borg4, and Borg5 bind both TC10 and Cdc42 in a GTP-dependent manner. Surprisingly, Borg3 bound only to Cdc42. An intact CRIB (Cdc42, Rac interactive binding) domain was required for binding. No interaction of the Borgs with Rac1 or RhoA was detectable. Three-hemagglutinin epitope (HA(3))-tagged Borg3 protein was mostly cytosolic when expressed ectopically in NIH 3T3 cells, with some accumulation in membrane ruffles. The phenotype induced by Borg3 was reminiscent of that caused by an inhibition of Rho function and was reversed by overexpression of Rho. Surprisingly, it was independent of the ability to bind Cdc42. Borg3 also inhibited Jun kinase activity by a mechanism that was independent of Cdc42 binding. HA(3)-Borg3 expression caused substantial delays in the spreading of cells on fibronectin surfaces after replating, and the spread cells lacked stress fibers. We propose that the Borg proteins function as negative regulators of Rho GTPase signaling.

ACCESSION NUMBER: 1999421943 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10490598
TITLE: The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.

AUTHOR: Joberty G; Perlungher R R; Macara I G
CORPORATE SOURCE: Markey Center for Cell Signaling and Department of Pharmacology, University of Virginia, Charlottesville, Virginia 22908, USA.. gmj4h@virginia.edu
CONTRACT NUMBER: CA 56300 (NCI)
SOURCE: Molecular and cellular biology, (1999 Oct) 19 (10) 6585-97. Journal code: 8109087. ISSN: 0270-7306.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF163840; GENBANK-AF164118; GENBANK-AF164119; GENBANK-AF165114
ENTRY MONTH: 200002
ENTRY DATE: Entered STN: 20000209
Last Updated on STN: 20000209
Entered Medline: 20000203

L2 ANSWER 3 OF 26 MEDLINE on STN

TI **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.

AB Cdc42 is a member of the Rho GTPase family that regulates multiple cellular activities, including actin polymerization, kinase-signaling activation, and cell polarization. **MSE55** is a nonkinase CRIB (Cdc42/Rac interactive-binding) domain-containing molecule of unknown function. Using glutathione S-transferase-capture experiments, we show that **MSE55** binds to Cdc42 in a GTP-dependent manner. **MSE55** binding to Cdc42 required an intact CRIB domain, because a **MSE55** CRIB domain mutant no longer interacted with Cdc42. To study the function of **MSE55** we transfected either wild-type **MSE55** or a **MSE55** CRIB mutant into mammalian cells. In Cos-7 cells, wild-type **MSE55** localized at membrane ruffles and increased membrane actin polymerization, whereas expression of the **MSE55** CRIB mutant showed fewer membrane ruffles. In contrast to these results, **MSE55** induced the formation of long, actin-based protrusions in NIH 3T3 cells as detected by immunofluorescence and live-cell video microscopy. **MSE55**-induced protrusion formation was blocked by expression of dominant-negative N17Cdc42, but not by expression of dominant-negative N17Rac. These findings indicate that **MSE55** is a Cdc42 effector protein that mediates actin cytoskeleton reorganization at the plasma membrane.

ACCESSION NUMBER: 1999362714 MEDLINE
DOCUMENT NUMBER: PubMed ID: 10430899
TITLE: **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.
AUTHOR: Burbelo P D; Snow D M; Bahou W; Spiegel S
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology and Lombardi Cancer Center, Georgetown University Medical Center, Washington, DC 20007, USA.. burbelop@medlib.georgetown.edu
CONTRACT NUMBER: GM43880 (NIGMS)
R29-CA 77459-01 (NCI)
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1999 Aug 3) 96 (16) 9083-8. Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF098290
ENTRY MONTH: 199909
ENTRY DATE: Entered STN: 19990925
Last Updated on STN: 20000303
Entered Medline: 19990909

L2 ANSWER 4 OF 26 MEDLINE on STN
TI Distinct cellular effects and interactions of the Rho-family GTPase TC10.
AB BACKGROUND: Rho-family GTPases have central roles in cytoskeletal organization, proliferation, differentiation and apoptosis. Multiple factors possessing overlapping specificities for Rho GTPases have been identified. The Rho GTPases Cdc42 and Rac share many regulators and effectors, yet produce different phenotypes when expressed as gain-of-function mutants in cells. The Rho-family member TC10 has remained almost completely uncharacterized, so it was of interest to determine whether TC10 has unique cellular effects and interacts with the same targets as Cdc42 and Rac. RESULTS: A gain-of-function TC10 mutant protein expressed in fibroblasts induced cell rounding, loss of stress fibers and formation of peripheral extensions. The extensions were longer than those induced by the analogous Cdc42 mutant protein. Cells expressing TC10 also possessed fewer membrane ruffles and stress fibers than those expressing Cdc42. TC10 mRNA was most highly expressed in heart and skeletal muscle. The GTPase activity of TC10 was lower than that of Cdc42, and TC10 possessed a lower affinity for, but greater responsiveness to, the p50Rho GTPase-activating protein (p50RhoGAP) than did Cdc42. TC10 stimulated Jun N-terminal kinase (JNK) and p21-activated kinase (PAK) activities and interacted with a set of effectors (alpha-, beta- and gammaPAK, MRCKalpha/beta, MLK2, N-WASP and **MSE55**) that overlaps with those for Cdc42 and Rac. TC10 did not interact with MLK3 or WASP, and interacted only weakly with ACK-1. CONCLUSIONS: TC10 possesses distinct features, but exhibits a phenotype most closely related to that of Cdc42. It interacts with a similar subset of effectors to Cdc42 but not with MLK3, WASP or ACK-1. It is regulated differentially by p50RhoGAP.

ACCESSION NUMBER: 1999018255 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9799731
TITLE: Distinct cellular effects and interactions of the Rho-family GTPase TC10.
AUTHOR: Neudauer C L; Joberty G; Tatsis N; Macara I G
CORPORATE SOURCE: Center for Cell Signaling University of Virginia Charlottesville, Virginia, 22908, USA.
CONTRACT NUMBER: CA56300 (NCI)
SOURCE: Current biology : CB, (1998 Oct 22) 8 (21) 1151-60. Journal code: 9107782. ISSN: 0960-9822.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Space Life Sciences
ENTRY MONTH: 199812
ENTRY DATE: Entered STN: 19990115
Last Updated on STN: 20020420
Entered Medline: 19981209

L2 ANSWER 5 OF 26 MEDLINE on STN
TI A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.
AB Rho, Rac, and Cdc42 are small GTPases that regulate the formation of a variety of actin structures and the assembly of associated integrin complexes, but little is known about the target proteins that mediate their effects. Here we have used a motif-based search method to identify putative effector proteins for Rac and Cdc42. A search of the GenBankTM data base for similarity with the minimum Cdc42/Rac interactive binding (CRIB) region of a potential effector protein p65PAK has identified over 25 proteins containing a similar motif from a range of different species. These candidate Cdc42/Rac-binding proteins include family members of the mixed lineage kinases (MLK), a novel tyrosine kinase from Drosophila melanogaster (DPR2), a human protein **MSE55**, and several novel yeast and Caenorhabditis elegans proteins. Two murine p65PAK isoforms and a candidate protein from C. elegans, F09F7.5, interact strongly with the

GTP form of both Cdc42 and Rac, but not Rho in a filter binding assay. Three additional candidate proteins, DPR2, **MSE55**, and MLK3 showed binding to the GTP form of Cdc42 and weaker binding with Rac, and again no interaction with Rho. These results indicate that proteins containing the CRIB motif bind to Cdc42 and/or Rac in a GTP-dependent manner, and they may, therefore, participate in downstream signaling.

ACCESSION NUMBER: 96094289 MEDLINE
DOCUMENT NUMBER: 96094289 PubMed ID: 7493928
TITLE: A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.
AUTHOR: Burbelo P D; Drechsel D; Hall A
CORPORATE SOURCE: Medical Research Council Laboratory for Molecular Cell Biology, University College London, United Kingdom.
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1995 Dec 8) 270 (49) 29071-4.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199601
ENTRY DATE: Entered STN: 19960217
Last Updated on STN: 20020420
Entered Medline: 19960111

L2 ANSWER 6 OF 26 MEDLINE on STN
TI cDNA cloning and molecular characterization of **MSE55**, a novel human serum constituent protein that displays bone marrow stromal/endothelial cell-specific expression.
AB Hemonectin is a lineage-specific cytoadhesive protein that may be involved in the developmentally regulated adhesion of granulocytic cells to bone marrow stroma. Immunoblot analysis using an anti-hemonectin antibody recognizes two distinct immunoreactive species in endothelial cell lysates (approximately M(r) 65,000) and human serum (approximately M(r) 55,000). Initial characterization of the 55-kDa protein has now been completed by isolating the cDNA from a human endothelial cell expression library. Sequence analysis of overlapping clones identifies a composite sequence spanning 2030 nucleotides with an open reading frame of 1173 base pairs. No significant sequence similarity was observed on analysis of current GenBank databases. The open reading frame was expressed as a recombinant protein in Escherichia coli and used as an immunogen for the production of a specific polyclonal antibody. Immunoblotting with this antibody identifies a single immunoreactive species of apparent M(r) 55,000 in HUVEC lysates and human serum, confirming that a secreted form normally circulates as a serum constituent protein. This antibody fails to recognize purified hemonectin, suggesting that the M(r) 55,000 protein is not hemonectin. Cross-species Southern blot analysis reveals persistent hybridizing fragments in all species tested, suggestive of a developmentally conserved function. Northern blot analysis demonstrates expression limited to endothelial and bone marrow stromal cells, but not poly(A) RNA from monkey liver, spleen, brain, lung, and kidney. On this basis, we have designated this novel protein **MSE55**, for marrow stromal/endothelial cell protein with a molecular mass of 55,000 daltons. Its tissue-specific expression may suggest a functional role in hematopoiesis.

ACCESSION NUMBER: 92332498 MEDLINE
DOCUMENT NUMBER: PubMed ID: 1629197
TITLE: cDNA cloning and molecular characterization of **MSE55**, a novel human serum constituent protein that displays bone marrow stromal/endothelial cell-specific expression.
AUTHOR: Bahou W F; Campbell A D; Wicha M S
CORPORATE SOURCE: Division of Hematology, State University of New York, Stony Brook 11794-8151.

CONTRACT NUMBER: HL02431 (NHLBI)
HL35255 (NHLBI)
SOURCE: Journal of biological chemistry, (1992 Jul 15) 267 (20) 13986-92.
Journal code: 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-M63383; GENBANK-M86615; GENBANK-M86616; GENBANK-M86617; GENBANK-M86618; GENBANK-M86619; GENBANK-M86620; GENBANK-M88338; GENBANK-M90360; GENBANK-X62322
ENTRY MONTH: 199208
ENTRY DATE: Entered STN: 19920904
Last Updated on STN: 19950206
Entered Medline: 19920814

L2 ANSWER 7 OF 26 USPATFULL on STN
TI Endometrial genes in endometrial disorders
AB Genetic sequences are identified with expression levels that are upregulated or downregulated in human endometrium during the window of implantation. The endometrial signature of genes during the window of implantation provides diagnostic screening tests for patients with infertility and endometrial disorders, and endometriosis; and for targeted drug discovery for treating implantation-based infertility, other endometrial disorders, and endometrial-based contraception.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER: 2004:7378 USPATFULL
TITLE: Endometrial genes in endometrial disorders
INVENTOR(S): Giudice, Linda C., Los Altos Hills, CA, UNITED STATES
Kao, Lee C., Foster City, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004005612	A1	20040108	
APPLICATION INFO.:	US 2003-437733	A1	20030513	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2002-380689P	20020514	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 4001
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 8 OF 26 USPATFULL on STN
TI Methods for predicting drug sensitivity in patients afflicted with an inflammatory disease
AB Methods are disclosed for predicting the efficacy of a drug for treating an inflammatory disease in a human patient, including: obtaining a sample of cells from the patient; obtaining a gene expression profile of the sample in the absence and presence of in vitro modulation of the cells with specific cytokines and/or mediators; and comparing the gene expression profile of the sample with a reference gene expression profile, wherein similarities between the sample expression profile and the reference expression profile predicts the efficacy of the drug for treating the inflammatory disease in the patient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:194965 USPATFULL
TITLE: Methods for predicting drug sensitivity in patients afflicted with an inflammatory disease
INVENTOR(S): Hakonarson, Hakon, Reykjavik, ICELAND
PATENT ASSIGNEE(S): deCODE genetics ehf., Reykjavik, ICELAND (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003134776	A1	20030717	
APPLICATION INFO.:	US 2002-234652	A1	20020903	(10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-947991, filed on 6 Sep 2001, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HAMILTON, BROOK, SMITH & REYNOLDS, P.C., 530 VIRGINIA ROAD, P.O. BOX 9133, CONCORD, MA, 01742-9133
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 2062
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 9 OF 26 USPATFULL on STN
TI Crib protein ZMSE1
AB The present invention relates to polynucleotide and polypeptide molecules for zmse1, a novel human CRIB protein. The polypeptides, and polynucleotides encoding them, may be used for detecting human chromosomal abnormalities and cancers. The present invention also includes antibodies to the zmse1 polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:148876 USPATFULL
TITLE: Crib protein ZMSE1
INVENTOR(S): Holloway, James L., Seattle, WA, United States
Gao, Zeren, Redmond, WA, United States
Whitmore, Theodore E., Redmond, WA, United States
PATENT ASSIGNEE(S): ZymoGenetics, Inc., Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6573069	B1	20030603	
APPLICATION INFO.:	US 2000-710794		20001109	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-164685P	19991110 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Whiteman, Brian
LEGAL REPRESENTATIVE: Johnson, Jennifer K.
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 4
NUMBER OF DRAWINGS: 10 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 4194
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 10 OF 26 USPATFULL on STN
TI Method of identifying renalgenerative agents using differential gene expression

AB Disclosed are methods of identifying renalgenerative agensts using differential gene expression. Also disclosed are methods of treating renal disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:106189 USPATFULL
TITLE: Method of identifying renalgenerative agents using differential gene expression
INVENTOR(S): Peyman, John A., New Haven, CT, UNITED STATES
Lehtonen, Eero, Helsinki, FINLAND
Crasta, Oswald R., Clinton, CT, UNITED STATES
Cate, Richard L., Cohasset, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003073100	A1	20030417	
APPLICATION INFO.:	US 2002-113312	A1	20020401	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-280258P	20010330 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MINTZ, LEVIN, COHN, FERRIS,, GLOVSKY and POPEO, P.C., One Financial Center, Boston, MA, 02111
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 1170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 11 OF 26 USPATFULL on STN
TI Compositions, kits, and methods for identification, assessment, prevention, and therapy of psoriasis
AB The invention relates to compositions, kits, and methods for detecting, characterizing, preventing, and treating psoriasis. A variety of markers are provided, wherein changes in the levels of expression of one or more of the markers is correlated with the presence of psoriasis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:66885 USPATFULL
TITLE: Compositions, kits, and methods for identification, assessment, prevention, and therapy of psoriasis
INVENTOR(S): Trepicchio, William L., Andover, MA, UNITED STATES
Oestreicher, Judith L., Portsmouth, NH, UNITED STATES
Dorner, Andrew J., Lexington, MA, UNITED STATES
Krueger, James G., New York, NY, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002037538	A1	20020328	
APPLICATION INFO.:	US 2001-852400	A1	20010509	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-203087P	20000509 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 6087
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 12 OF 26 USPATFULL on STN
TI Genes defferentially expressed in secretory versus proliferative endometrium
AB The present invention compares expression profiles from matched samples to identify differential gene expression. Samples are matched according to physiological, pharmacological and/or disease state. Comparison of matched samples eliminates gene expression differences that are the result of changes in variables that are not of interest. The gene expression differences that remain can be attributed with a high degree of confidence to the unmatched variation. The gene expression differences thus identified can be used for example to diagnose disease, identify physiological state, design drugs, and monitor therapies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:	2001:212110 USPATFULL		
TITLE:	Genes defferentially expressed in secretory versus proliferative endometrium		
INVENTOR(S):	Warrington, Janet A., Los Altos, CA, United States Mahadevappa, Mamatha, Cupertino, CA, United States		
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001044104	A1	20011122
APPLICATION INFO.:	US 2000-734752	A1	20001211 (9)
	NUMBER		DATE
PRIORITY INFORMATION:	US 2000-193719P		20000331 (60)
	US 2000-231367P		20000908 (60)
	US 2000-240678P		20001013 (60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	AFFYMETRIX, INC, ATTN: CHIEF IP COUNSEL, LEGAL DEPT., 3380 CENTRAL EXPRESSWAY, SANTA CLARA, CA, 95051		
NUMBER OF CLAIMS:	9		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1570		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 13 OF 26 USPATFULL on STN
TI Method of producing transgenic animals for xenotransplantation expressing both an enzyme masking or reducing the level of the gal epitope and a complement inhibitor
AB A method of xenotransplanting organs, tissues, cells or non-viable components which reduces or prevents antibody-mediated rejections, including hyperacute rejection, is provided wherein transgenic animals are produced that express at least one enzyme which masks or reduces the level of the antigenic Galα(1,3)Gal or gal epitope, and at least one complement inhibitor such as CD59, DAF and/or MCP. The transgenic animals which express both a gal epitope-reducing enzyme and a complement inhibitor will have masked or reduced levels of the gal epitope and will be much less likely to produce an antibody-mediated rejection following transplantation, and the expression of the complement inhibitor will also suppress complement activation and reduce even further a severe immune reaction following the transplantation of donor organs, tissue, cells or non-viable components from the transgenic animals so produced. In addition, transgenic animals are provided which express a plurality of complement inhibitors or other proteins from a locus of genes at a single integration site. The present invention is thus advantageous in that it can provide xenogeneic organs, tissues, cells and non-viable components which can be transplanted safely and effectively into humans with a reduction or elimination of antibody-mediated rejection to an extent not previously possible, and which will significantly reduce the need to obtain donor organs,

tissues, cells or non-viable components from human or primate donors.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:174914 USPATFULL
TITLE: Method of producing transgenic animals for xenotransplantation expressing both an enzyme masking or reducing the level of the gal epitope and a complement inhibitor
INVENTOR(S): Diamond, Lisa E., Princeton, NJ, United States
Logan, John S., Robbinsville, NJ, United States
Byrne, Geurard W., Allentown, NJ, United States
Sharma, Ajay, Lawrenceville, NJ, United States
PATENT ASSIGNEE(S): Nextran Inc., Princeton, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6166288		20001226	
APPLICATION INFO.:	US 1996-675773		19960703	(8)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1995-4461P	19950927	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Clark, Deborah J. R.
LEGAL REPRESENTATIVE: Cooper, Iver P., Guthrie, Janice
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1,24,30
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 19 Drawing Page(s)
LINE COUNT: 4854
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 14 OF 26 DGENE COPYRIGHT 2004 THOMSON DERWENT on STN
TI Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
AN AAY92240 Protein DGENE
AB Human bone marrow-derived serum proteins (BMDSP) 2 has chemical and structural similarity with **MSE55**. BMDSP-1 and BMDSP-2 are useful for treating or preventing a disorder associated with decreased expression or activity of BMDSP. Antagonists of BMDSP are useful for treating or preventing a disorder associated with increased expression or activity of bone marrow-derived serum proteins. The disorders include cancers (melanoma, adenocarcinoma, sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS), asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis, osteo- and rheumatoid arthritis), viral infections, parasitic infections (schistosoma, tapeworm), and vascular disorders (arteriosclerosis, hypertension, vasculitis).
ACCESSION NUMBER: AAY92240 Protein DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: N-PSDB: AAA09155
DESCRIPTION: Human bone marrow-derived serum protein 2.

L2 ANSWER 15 OF 26 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.

AB Cdc42, a Rho GTPase, regulates the organization of the actin cytoskeleton by its interaction with several distinct families of downstream effector proteins. Here, we report the identification of four new Cdc42-binding proteins that, along with **MSE55**, constitute a new family of effector proteins. These molecules, designated CEPs, contain three regions of homology, including a Cdc42 binding domain and two unique domains called CI and CII. Experimentally, we have verified that CEP2 and CEP5 bind Cdc42. Expression of CEP2, CEP3, CEP4, and CEP5 in NIH-3T3 fibroblasts induced pseudopodia formation. Fibroblasts coexpressing dominant negative Cdc42 with CEP2 or expressing a Cdc42/Rac interactive binding domain mutant of CEP2 did not induce pseudopodia formation. In primary keratinocytes, CEP2- and CEP5-expressing cells showed reduced F-actin localization at the adherens junctions with an increase in thin stress fibers that extended the length of the cell body. Keratinocytes expressing CEPs also showed an altered vinculin distribution and a loss of E-cadherin from adherens junctions. Similar effects were observed in keratinocytes expressing constitutively active Cdc42, but were not seen with a Cdc42/Rac interactive binding domain mutant of CEP2. These results suggest that CEPs act downstream of Cdc42 to induce actin filament assembly leading to cell shape changes.

ACCESSION NUMBER: 2001036862 EMBASE
TITLE: A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.
AUTHOR: Hirsch D.S.; Pirone D.M.; Burbelo P.D.
CORPORATE SOURCE: P.D. Burbelo, Georgetown University Medical Center, New Research Bldg.0, Lombardi Cancer Center, 3970 Reservoir Rd., NW, Washington, DC 20007, United States. burbelpd@gunet.georgetown.edu
SOURCE: Journal of Biological Chemistry, (12 Jan 2001) 276/2 (875-883).
Refs: 48
ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

TI The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.

AB The Rho family of GTPases plays key roles in the regulation of cell motility and morphogenesis. They also regulate protein kinase cascades, gene expression, and cell cycle progression. This multiplicity of roles requires that the Rho GTPases interact with a wide variety of downstream effector proteins. An understanding of their functions at a molecular level therefore requires the identification of the entire set of such effectors. Towards this end, we performed a two-hybrid screen using the TC10 GTPase as bait and identified a family of putative effector proteins related to **MSE55**, a murine stromal and epithelial cell protein of 55 kDa. We have named this family the Borg (binder of Rho GTPases) proteins. Complete open reading frames have been obtained for Borg1 through Borg3. We renamed **MSE55** as Borg5. Borg1, Borg2, Borg4, and Borg5 bind both TC10 and Cdc42 in a GTP-dependent manner. Surprisingly, Borg3 bound only to Cdc42. An intact CRIB (Cdc42, Rac interactive binding) domain was required for binding. No interaction of the Borgs with Rac1 or RhoA was detectable. Three-hemagglutinin epitope (HA3)- tagged Borg3 protein was mostly cytosolic when expressed ectopically in NIH 3T3 cells, with some accumulation in membrane ruffles.

The phenotype induced by Borg3 was reminiscent of that caused by an inhibition of Rho function and was reversed by overexpression of Rho. Surprisingly, it was independent of the ability to bind Cdc42. Borg3 also inhibited Jun kinase activity by a mechanism that was independent of Cdc42 binding. HA3-Borg3 expression caused substantial delays in the spreading of cells on fibronectin surfaces after replating, and the spread cells lacked stress fibers. We propose that the Borg proteins function as negative regulators of Rho GTPase signaling.

ACCESSION NUMBER: 1999328200 EMBASE
TITLE: The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.
AUTHOR: Joberty G.; Perlungher R.R.; Macara I.G.
CORPORATE SOURCE: G. Joberty, Box 577, HSC, Univ. of Virginia School of Medicine, Hospital West, Charlottesville, VA 22908, United States. gmj4h@virginia.edu
SOURCE: Molecular and Cellular Biology, (1999) 19/10 (6585-6597).
Refs: 56
ISSN: 0270-7306 CODEN: MCEBD4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 17 OF 26 EMBASE
on STN
TI **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.
AB Cdc42 is a member of the Rho GTPase family that regulates multiple cellular activities, including actin polymerization, kinase-signaling activation, and cell polarization. **MSE55** is a nonkinase CRIB (Cdc42/Rac interactive-binding) domain-containing molecule of unknown function. Using glutathione S-transferase-capture experiments, we show that **MSE55** binds to Cdc42 in a GTP-dependent manner. **MSE55** binding to Cdc42 required an intact CRIB domain, because a **MSE55** CRIB domain mutant no longer interacted with Cdc42. To study the function of **MSE55** we transfected either wild-type **MSE55** or a **MSE55** CRIB mutant into mammalian cells. In Cos-7 cells, wild-type **MSE55** localized at membrane ruffles and increased membrane actin polymerization, whereas expression of the **MSE55** CRIB mutant showed fewer membrane ruffles. In contrast to these results, **MSE55** induced the formation of long, actin-based protrusions in NIH 3T3 cells as detected by immunofluorescence and live-cell video microscopy. **MSE55**-induced protrusion formation was blocked by expression of dominant-negative N17Cdc42, but not by expression of dominant- negative N17Rac. These findings indicate that **MSE55** is a Cdc42 effector protein that mediates actin cytoskeleton reorganization at the plasma membrane.

ACCESSION NUMBER: 1999278946 EMBASE
TITLE: **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.
AUTHOR: Burbelo P.D.; Snow D.M.; Bahou W.; Spiegel S.
CORPORATE SOURCE: P.D. Burbelo, Dept. of Biochemistry/Molec. Biology, Lombardi Cancer Center, Georgetown University Medical Center, Washington, DC 20007, United States. burbelop@medlib.georgetown.edu
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (6 Aug 1999) 96/16 (9083-9088).
Refs: 39
ISSN: 0027-8424 CODEN: PNASA6
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English

SUMMARY LANGUAGE: English

L2 ANSWER 18 OF 26 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.

AB Rho, Rac, and Cdc42 are small GTPases that regulate the formation of a variety of actin structures and the assembly of associated integrin complexes, but little is known about the target proteins that mediate their effects. Here we have used a motif-based search method to identify putative effector proteins for Rac and Cdc42. A search of the GenBank(TM) data base for similarity with the minimum Cdc42/Rac interactive binding (CRIB) region of a potential effector protein p65(PAK) has identified over 25 proteins containing a similar motif from a range of different species. These candidate Cdc42/Rac-binding proteins include family members of the mixed lineage kinases (MLK), a novel tyrosine kinase from Drosophila melanogaster (DPR2), a human protein **MSE55**, and several novel yeast and Caenorhabditis elegans proteins. Two murine p65(PAK) isoforms and a candidate protein from C. elegans, F09F7.5, interact strongly with the GTP form of both Cdc42 and Rac, but not Rho in a filter binding assay. Three additional candidate proteins, DPR2, **MSE55**, and MLK3 showed binding to the GTP form of Cdc42 and weaker binding with Rac, and again no interaction with Rho. These results indicate that proteins containing the CRIB motif bind to Cdc42 and/or Rac in a GTP- dependent manner, and they may, therefore, participate in downstream signaling.

ACCESSION NUMBER: 95371473 EMBASE
DOCUMENT NUMBER: 1995371473
TITLE: A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.
AUTHOR: Burbelo P.D.; Drechsel D.; Hall A.
CORPORATE SOURCE: Department of Biochemistry, University College London,London WC1E 6BT, United Kingdom
SOURCE: Journal of Biological Chemistry, (1995) 270/49 (29071-29074).
ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 19 OF 26 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

TI cDNA cloning and molecular characterization of **MSE55**, a novel human serum constituent protein that displays bone marrow stromal/endothelial cell- specific expression.

AB Hemonectin is a lineage-specific cytoadhesive protein that may be involved in the developmentally regulated adhesion of granulocytic cells to bone marrow stroma. Immunoblot analysis using an anti-hemonectin antibody recognizes two distinct immunoreactive species in endothelial cell lysates (.apprx.M(r) 65,000) and human serum (.apprx.M(r) 55,000). Initial characterization of the 55-kDa protein has now been completed by isolating the cDNA from a human endothelial cell expression library. Sequence analysis of overlapping clones identifies a composite sequence spanning 2030 nucleotides with an open reading frame of 1173 base pairs. No significant sequence similarity was observed on analysis of current GenBank databases. The open reading frame was expressed as a recombinant protein in Escherichia coli and used as an immunogen for the production of a specific polyclonal antibody. Immunoblotting with this antibody identifies a single immunoreactive species of apparent M(r) 55,000 in HUVEC lysates and human serum, confirming that a secreted form normally circulates as a serum constituent protein. This antibody fails to recognize purified hemonectin, suggesting that the M(r) 55,000 protein is not hemonectin. Cross-species Southern blot analysis reveals persistent

hybridizing fragments in all species tested, suggestive of a developmentally conserved function. Northern blot analysis demonstrates expression limited to endothelial and bone marrow stromal cells, but not poly(A) RNA from monkey liver, spleen, brain, lung, and kidney. On this basis, we have designated this novel protein **MSE55**, for marrow stromal/endothelial cell protein with a molecular mass of 55,000 daltons. Its tissue-specific expression may suggest a functional role in hematopoiesis.

ACCESSION NUMBER: 92245763 EMBASE
DOCUMENT NUMBER: 1992245763
TITLE: cDNA cloning and molecular characterization of **MSE55**, a novel human serum constituent protein that displays bone marrow stromal/endothelial cell- specific expression.
AUTHOR: Bahou W.F.; Campbell A.D.; Wicha M.S.
CORPORATE SOURCE: Division of Hematology, State University of New York,Stony Brook, NY 11794-8151, United States
SOURCE: Journal of Biological Chemistry, (1992) 267/20 (13986-13992).
ISSN: 0021-9258 CODEN: JBCHA3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 025 Hematology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 20 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.
AB Cdc42, a Rho GTPase, regulates the organization of the actin cytoskeleton by its interaction with several distinct families of downstream effector proteins. Here, we report the identification of four new Cdc42-binding proteins that, along with **MSE55**, constitute a new family of effector proteins. These molecules, designated CEPs, contain three regions of homology, including a Cdc42 binding domain and two unique domains called CI and CII. Experimentally, we have verified that CEP2 and CEP5 bind Cdc42. Expression of CEP2, CEP3, CEP4, and CEP5 in NIH-3T3 fibroblasts induced pseudopodia formation. Fibroblasts coexpressing dominant negative Cdc42 with CEP2 or expressing a Cdc42/Rac interactive binding domain mutant of CEP2 did not induce pseudopodia formation. In primary keratinocytes, CEP2- and CEP5-expressing cells showed reduced F-actin localization at the adherens junctions with an increase in thin stress fibers that extended the length of the cell body. Keratinocytes expressing CEPs also showed an altered vinculin distribution and a loss of E-cadherin from adherens junctions. Similar effects were observed in keratinocytes expressing constitutively active Cdc42, but were not seen with a Cdc42/Rac interactive binding domain mutant of CEP2. These results suggest that CEPs act downstream of Cdc42 to induce actin filament assembly leading to cell shape changes.

ACCESSION NUMBER: 2001:219133 BIOSIS
DOCUMENT NUMBER: PREV200100219133
TITLE: A new family of Cdc42 effector proteins, CEPs, function in fibroblast and epithelial cell shape changes.
AUTHOR(S): Hirsch, Dianne Snow; Pirone, Dana M.; Burbelo, Peter D. [Reprint author]
CORPORATE SOURCE: Lombardi Cancer Center, Georgetown University Medical Center, 3970 Reservoir Rd., NW, Rm. EG16, New Research Bldg., Washington, DC, 20007, USA
burbelpd@gunet.georgetown.edu
SOURCE: Journal of Biological Chemistry, (January 12, 2001) Vol. 276, No. 2, pp. 875-883. print.
CODEN: JBCHA3. ISSN: 0021-9258.
DOCUMENT TYPE: Article

LANGUAGE: English
OTHER SOURCE: Genbank-AF098290; Genbank-AF099664; Genbank-AF102773; Genbank-AF104857
ENTRY DATE: Entered STN: 9 May 2001
Last Updated on STN: 19 Feb 2002

L2 ANSWER 21 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.
AB The Rho family of GTPases plays key roles in the regulation of cell motility and morphogenesis. They also regulate protein kinase cascades, gene expression, and cell cycle progression. This multiplicity of roles requires that the Rho GTPases interact with a wide variety of downstream effector proteins. An understanding of their functions at a molecular level therefore requires the identification of the entire set of such effectors. Towards this end, we performed a two-hybrid screen using the TC10 GTPase as bait and identified a family of putative effector proteins related to **MSE55**, a murine stromal and epithelial cell protein of 55 kDa. We have named this family the Borg (binder of Rho GTPases) proteins. Complete open reading frames have been obtained for Borg1 through Borg3. We renamed **MSE55** as Borg5. Borg1, Borg2, Borg4, and Borg5 bind both TC10 and Cdc42 in a GTP-dependent manner. Surprisingly, Borg3 bound only to Cdc42. An intact CRIB (Cdc42, Rac interactive binding) domain was required for binding. No interaction of the Borgs with Rac1 or RhoA was detectable. Three-hemagglutinin epitope (HA3)-tagged Borg3 protein was mostly cytosolic when expressed ectopically in NIH 3T3 cells, with some accumulation in membrane ruffles. The phenotype induced by Borg3 was reminiscent of that caused by an inhibition of Rho function and was reversed by overexpression of Rho. Surprisingly, it was independent of the ability to bind Cdc42. Borg3 also inhibited Jun kinase activity by a mechanism that was independent of Cdc42 binding. HA3-Borg3 expression caused substantial delays in the spreading of cells on fibronectin surfaces after replating, and the spread cells lacked stress fibers. We propose that the Borg proteins function as negative regulators of Rho GTPase signaling.
ACCESSION NUMBER: 1999:496666 BIOSIS
DOCUMENT NUMBER: PREV199900496666
TITLE: The Borgs, a new family of Cdc42 and TC10 GTPase-interacting proteins.
AUTHOR(S): Joberty, Gerard [Reprint author]; Perlungher, Richard R.; Macara, Ian G.
CORPORATE SOURCE: HSC, University of Virginia School of Medicine, Room 7191 Hospital West, Charlottesville, VA, 22908, USA
SOURCE: Molecular and Cellular Biology, (Oct., 1999) Vol. 19, No. 10, pp. 6585-6597. print.
CODEN: MCEBD4. ISSN: 0270-7306.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 23 Nov 1999
Last Updated on STN: 5 Jun 2000

L2 ANSWER 22 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.
AB Cdc42 is a member of the Rho GTPase family that regulates multiple cellular activities, including actin polymerization, kinase-signaling activation, and cell polarization. **MSE55** is a nonkinase CRIB (Cdc42/Rac interactive-binding) domain-containing molecule of unknown function. Using glutathione S-transferase-capture experiments, we show that **MSE55** binds to Cdc42 in a GTP-dependent manner. **MSE55** binding to Cdc42 required an intact CRIB domain, because a **MSE55** CRIB domain mutant no longer interacted with Cdc42. To study the function of **MSE55** we transfected either wild-type **MSE55** or a **MSE55** CRIB mutant into mammalian cells. In Cos-7 cells, wild-type **MSE55** localized at membrane ruffles and

increased membrane actin polymerization, whereas expression of the **MSE55** CRIB mutant showed fewer membrane ruffles. In contrast to these results, **MSE55** induced the formation of long, actin-based protrusions in NIH 3T3 cells as detected by immunofluorescence and live-cell video microscopy. **MSE55**-induced protrusion formation was blocked by expression of dominant-negative N17Cdc42, but not by expression of dominant-negative N17Rac. These findings indicate that **MSE55** is a Cdc42 effector protein that mediates actin cytoskeleton reorganization at the plasma membrane.

ACCESSION NUMBER: 1999:396252 BIOSIS
DOCUMENT NUMBER: PREV199900396252
TITLE: **MSE55**, a Cdc42 effector protein, induces long cellular extensions in fibroblasts.
AUTHOR(S): Burbelo, Peter D. [Reprint author]; Snow, Dianne M.; Bahou, Wadie; Spiegel, Sarah
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology and Lombardi Cancer Center, Georgetown University Medical Center, Washington, DC, 20007, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (Aug. 3, 1999) Vol. 96, No. 16, pp. 9083-9088. print.
CODEN: PNASA6. ISSN: 0027-8424.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Oct 1999
Last Updated on STN: 8 Oct 1999

L2 ANSWER 23 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI Distinct cellular effects and interactions of the Rho-family GTPase TC10.
AB Background: Rho-family GTPases have central roles in cytoskeletal organization, proliferation, differentiation and apoptosis. Multiple factors possessing overlapping specificities for Rho GTPases have been identified. The Rho GTPases Cdc42 and Rac share many regulators and effectors, yet produce different phenotypes when expressed as gain-of-function mutants in cells. The Rho-family member TC10 has remained almost completely uncharacterized, so it was of interest to determine whether TC10 has unique cellular effects and interacts with the same targets as Cdc42 and Rac. Results: A gain-of-function TC10 mutant protein expressed in fibroblasts induced cell rounding, loss of stress fibers and formation of peripheral extensions. The extensions were longer than those induced by the analogous Cdc42 mutant protein. Cells expressing TC10 also possessed fewer membrane ruffles and stress fibers than those expressing Cdc42. TC10 mRNA was most highly expressed in heart and skeletal muscle. The GTPase activity of TC10 was lower than that of Cdc42, and TC10 possessed a lower affinity for, but greater responsiveness to, the p50Rho GTPase-activating protein (p50RhoGAP) than did Cdc42. TC10 stimulated Jun N-terminal kinase (JNK) and p21-activated kinase (PAK) activities and interacted with a set of effectors (alpha-, beta- and gammaPAK, MRCKalpha/beta, MLK2, N-WASP and **MSE55**) that overlaps with those for Cdc42 and Rac. TC10 did not interact with MLK3 or WASP, and interacted only weakly with ACK-1. Conclusions: TC10 possesses distinct features, but exhibits a phenotype most closely related to that of Cdc42. It interacts with a similar subset of effectors to Cdc42 but not with MLK3, WASP or ACK-1. It is regulated differentially by p50RhoGAP.

ACCESSION NUMBER: 1999:822 BIOSIS
DOCUMENT NUMBER: PREV199900000822
TITLE: Distinct cellular effects and interactions of the Rho-family GTPase TC10.
AUTHOR(S): Neudauer, Cheryl L.; Joberty, Gerard; Tatsis, Nia; Macara, Ian G.
CORPORATE SOURCE: Cent. Cell Signaling, Univ. Va., Charlottesville, VA 22908, USA
SOURCE: Current Biology, (Oct. 22, 1998) Vol. 8, No. 21, pp.

1151-1160. print.
CODEN: CUBLE2. ISSN: 0960-9822.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Jan 1999
Last Updated on STN: 11 Jan 1999

L2 ANSWER 24 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.
AB Rho, Rac, and Cdc42 are small GTPases that regulate the formation of a variety of actin structures and the assembly of associated integrin complexes, but little is known about the target proteins that mediate their effects. Here we have used a motif-based search method to identify putative effector proteins for Rac and Cdc42. A search of the GenBank data base for similarity with the minimum Cdc42/Rac interactive binding (CRIB) region of a potential effector protein p65-PAK has identified over 25 proteins containing a similar motif from a range of different species. These candidate Cdc42/Rac-binding proteins include family members of the mixed lineage kinases (MLK), a novel tyrosine kinase from Drosophila melanogaster (DPR2), a human protein **MSE55**, and several novel yeast and Caenorhabditis elegans proteins. Two murine p65-PAK isoforms and a candidate protein from C. elegans, F09F7.5, interact strongly with the GTP form of both Cdc42 and Rac, but not Rho in a filter binding assay. Three additional candidate proteins, DPR2, **MSE55**, and MLK3 showed binding to the GTP form of Cdc42 and weaker binding with Rac, and again no interaction with Rho. These results indicate that proteins containing the CRIB motif bind to Cdc42 and/or Rac in a GTP-dependent manner, and they may, therefore, participate in downstream signaling.
ACCESSION NUMBER: 1996:34524 BIOSIS
DOCUMENT NUMBER: PREV199698606659
TITLE: A conserved binding motif defines numerous candidate target proteins for both Cdc42 and Rac GTPases.
AUTHOR(S): Burbelo, Peter D.; Drechsel, David; Hall, Alan [Reprint author]
CORPORATE SOURCE: Dep. Biochem., Univ. Coll. London, London WC1E 6BT, UK
SOURCE: Journal of Biological Chemistry, (1995) Vol. 270, No. 49, pp. 29071-29074.
CODEN: JBCHA3. ISSN: 0021-9258.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jan 1996
Last Updated on STN: 27 Jan 1996

L2 ANSWER 25 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI CDNA CLONING AND MOLECULAR CHARACTERIZATION OF **MSE55** A NOVEL HUMAN SERUM CONSTITUENT PROTEIN THAT DISPLAYS BONE MARROW STROMAL-ENDOTHELIAL CELL-SPECIFIC EXPRESSION.
AB Hemonectin is a lineage-specific cytoadhesive protein that may be involved in the developmentally regulated adhesion of granulocytic cells to bone marrow stroma. Immunoblot analysis using an anti-hemonectin antibody recognizes two distinct immunoreactive species in endothelial cell lysates (.apprx. Mr 65,000) and human serum (.apprx.Mr 55,000). Initial characterization of the 55-kDa protein has now been completed by isolating the cDNA from a human endothelial cell expression library. Sequence analysis of overlapping clones identifies a composite sequence spanning 2030 nucleotides with an open reading frame of 1173 base pairs. No significant sequence similarity was observed on analysis of current GenBank databases. The open reading frame was expressed as a recombinant protein in Escherichia coli and used as an immunogen for the production of a specific polyclonal antibody. Immunoblotting with this antibody identifies a single immunoreactive species of apparent Mr 55,000 in HUVEC lysates and human serum, confirming that a secreted form normally circulates as a serum constituent protein. This antibody fails to

recognize purified hemonectin, suggesting that the Mr 55,000 protein is not hemonectin. Cross-species Southern blot analysis reveals persistent hybridizing fragments in all species tested, suggestive of a developmentally conserved function. Northern blot analysis demonstrates expression limited to endothelial and bone marrow stromal cells, but not poly(A) RNA from monkey liver, spleen, brain, lung, and kidney. On this basis, we have designated this novel protein **MSE55**, for marrow stromal/endothelial cell protein with a molecular mass of 55,000 daltons. Its tissue-specific expression may suggest a functional role in hematopoiesis.

ACCESSION NUMBER: 1992:406515 BIOSIS
DOCUMENT NUMBER: PREV199294069715; BA94:69715
TITLE: CDNA CLONING AND MOLECULAR CHARACTERIZATION OF **MSE55** A NOVEL HUMAN SERUM CONSTITUENT PROTEIN THAT DISPLAYS BONE MARROW STROMAL-ENDOTHELIAL CELL-SPECIFIC EXPRESSION.
AUTHOR(S): BAHOU W F [Reprint author]; CAMPBELL A D; WICHA M S
CORPORATE SOURCE: DIVISION HEMATOLOGY, STATE UNIVERSITY NEW YORK, STONY BROOK, NY 11794-8151, USA
SOURCE: Journal of Biological Chemistry, (1992) Vol. 267, No. 20, pp. 13986-13992.
CODEN: JBCHA3. ISSN: 0021-9258.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 9 Sep 1992
Last Updated on STN: 9 Sep 1992

L2 ANSWER 26 OF 26 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
TI CDNA CLONING AND MOLECULAR CHARACTERIZATION OF **MSE55** A NOVEL HUMAN SERUM CONSTITUENT PROTEIN THAT DISPLAYS BONE MARROW STROMAL-ENDOTHELIAL CELL-SPECIFIC EXPRESSION.
ACCESSION NUMBER: 1992:342134 BIOSIS
DOCUMENT NUMBER: PREV199243031684; BR43:31684
TITLE: CDNA CLONING AND MOLECULAR CHARACTERIZATION OF **MSE55** A NOVEL HUMAN SERUM CONSTITUENT PROTEIN THAT DISPLAYS BONE MARROW STROMAL-ENDOTHELIAL CELL-SPECIFIC EXPRESSION.
AUTHOR(S): BAHOU W [Reprint author]; CAMPBELL A; WICHA M
CORPORATE SOURCE: STATE UNIV OF NEW YORK/STONY BROOK, NY, USA
SOURCE: Clinical Research, (1992) Vol. 40, No. 2, pp. 284A.
Meeting Info.: THIRTY-SECOND ANNUAL MEETING OF THE AMERICAN SOCIETY FOR CLINICAL NUTRITION, BALTIMORE, MARYLAND, USA, APRIL 30-MAY 2, 1992. CLIN RES.
CODEN: CLREAS. ISSN: 0009-9279.
DOCUMENT TYPE: Conference; (Meeting)
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 16 Jul 1992
Last Updated on STN: 16 Jul 1992

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=> d his

     (FILE 'HOME' ENTERED AT 16:46:55 ON 26 FEB 2004)

     FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, FSTA, BIOSIS,
     JICST-EPLUS' ENTERED AT 16:47:18 ON 26 FEB 2004
L1             7 S BMDSP OR BONE MARROW DERIVED SERUM PROTEIN
L2            26 S MSE55
L3             1 S L1 AND L2

=> s GTPase effector activity
L4             0 GTPASE EFFECTOR ACTIVITY
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=> s l1 and antigen binding
L5            0 L1 AND ANTIGEN BINDING

=> s l1 and GTPase
L6            0 L1 AND GTPASE

=> s immunoglobulin kappa light chain
L7          784 IMMUNOGLOBULIN KAPPA LIGHT CHAIN

=> s l7 and l1
L8            2 L7 AND L1

=> d l8 ti abs ibib tot

L8    ANSWER 1 OF 2  DGENE  COPYRIGHT 2004 THOMSON DERWENT on STN
TI    Purified polypeptide for treating or preventing disorders associated with
      decreased expression or activity of bone marrow-derived serum proteins
AN    AAY92239  Protein       DGENE
AB    Human bone marrow-derived serum proteins (BMDSP) 1 has chemical
      and structural similarity with immunoglobulin kappa
      light chain.  BMDSP-1 and BMDSP-2
      are useful for treating or preventing a disorder associated with
      decreased expression or activity of BMDSP. Antagonists of
      BMDSP are useful for treating or preventing a disorder associated
      with increased expression or activity of bone marrow-derived serum
      proteins.  The disorders include cancers (melanoma, adenocarcinoma,
      sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS),
      asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis,
      osteo- and rheumatoid arthritis), viral infections, parasitic infections
      (schistosoma, tapeworm), and vascular disorders (arteriosclerosis,
      hypertension, vasculitis).
ACCESSION NUMBER: AAY92239  Protein       DGENE
TITLE:            Purified polypeptide for treating or preventing disorders
                  associated with decreased expression or activity of bone
                  marrow-derived serum proteins
INVENTOR:         Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE:  (INCY-N)INCYTE PHARM INC.
PATENT INFO:      WO 2000020588 A2 20000413                    72p
APPLICATION INFO: WO 1999-US22908  19991001
PRIORITY INFO:    US 1998-165621   19981002
DOCUMENT TYPE:    Patent
LANGUAGE:         English
OTHER SOURCE:     2000-303775 [26]
CROSS REFERENCES: N-PSDB: AAA09154
DESCRIPTION:      Human bone marrow-derived
                  serum protein 1.

L8    ANSWER 2 OF 2  DGENE  COPYRIGHT 2004 THOMSON DERWENT on STN
TI    Purified polypeptide for treating or preventing disorders associated with
      decreased expression or activity of bone marrow-derived serum proteins
AN    AAA09154  DNA       DGENE
AB    Human bone marrow-derived serum proteins (BMDSP) 1 has chemical
      and structural similarity with immunoglobulin kappa
      light chain.  BMDSP-1 and BMDSP-2
      are useful for treating or preventing a disorder associated with
      decreased expression or activity of BMDSP. Antagonists of
      BMDSP are useful for treating or preventing a disorder associated
      with increased expression or activity of bone marrow-derived serum
      proteins.  The disorders include cancers (melanoma, adenocarcinoma,
      sarcoma), immune disorders (acquired immunodeficiency syndrome (AIDS),
      asthma, atherosclerosis, Crohn's disease, bronchitis, multiple sclerosis,
      osteo- and rheumatoid arthritis), viral infections, parasitic infections
      (schistosoma, tapeworm), and vascular disorders (arteriosclerosis,
```

hypertension, vasculitis).

ACCESSION NUMBER: AAA09154 DNA DGENE
TITLE: Purified polypeptide for treating or preventing disorders associated with decreased expression or activity of bone marrow-derived serum proteins
INVENTOR: Tang Y T; Corley N C; Guegler K J; Lu D A M
PATENT ASSIGNEE: (INCY-N) INCYTE PHARM INC.
PATENT INFO: WO 2000020588 A2 20000413 72p
APPLICATION INFO: WO 1999-US22908 19991001
PRIORITY INFO: US 1998-165621 19981002
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2000-303775 [26]
CROSS REFERENCES: P-PSDB: AAY92239
DESCRIPTION: Human **BMDSP**-1 coding sequence.

```
 7 S BMDSP OR BONE MARROW DERIVED SERUM PROTEIN
L2            26 S MSE55
L3             1 S L1 AND L2
L4             0 S GTPASE EFFECTOR ACTIVITY
L5             0 S L1 AND ANTIGEN BINDING
L6             0 S L1 AND GTPASE
L7           784 S IMMUNOGLOBULIN KAPPA LIGHT CHAIN
L8             2 S L7 AND L1

=> s l1 and cancer
L9             1 L1 AND CANCER

=> d l9 ti abs ibib tot

L9   ANSWER 1 OF 1  USPATFULL on STN
TI     Combined pharmaceutical estrogen-androgen-progestin
AB     Disclosed are methods and compositions for oral contraception and for
       hormone replacement therapy. Certain compositions of the invention
       contain androgens, preferably methyltestosterone to be taken in
       conjunction with estrogens and progestins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
ACCESSION NUMBER:         2000:145919  USPATFULL
TITLE:                    Combined pharmaceutical estrogen-androgen-progestin
INVENTOR(S):              Hughes, Jr., Claude L., Simi Valley, CA, United States
                          Jayo, Manuel J., Advance, NC, United States
PATENT ASSIGNEE(S):       Cedars-Sinai Medical Center, Los Angeles, CA, United
                          States (U.S. corporation)
                          Wake Forest University, Winston-Salem, NC, United
                          States (U.S. corporation)

                               NUMBER         KIND    DATE
                               -------------- ------ --------
PATENT INFORMATION:       US 6139873                 20001031
APPLICATION INFO.:        US 1998-177866             19981023  (9)
RELATED APPLN. INFO.:     Continuation-in-part of Ser. No. US 1998-102707, filed
                          on 22 Jun 1998, now patented, Pat. No. US 5962021 which
                          is a continuation of Ser. No. US 1996-679764, filed on
                          10 Jul 1996, now patented, Pat. No. US 5770226
DOCUMENT TYPE:            Utility
FILE SEGMENT:             Granted
PRIMARY EXAMINER:         Spear, James M.
LEGAL REPRESENTATIVE:     Corder, Timothy S.Vinson & Elkins LLP
NUMBER OF CLAIMS:         39
EXEMPLARY CLAIM:          1
LINE COUNT:               2447
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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